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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/518,251	12/16/2004	Estelle Lesellier	FR 020063	8350

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PHILIPS INTELLECTUAL PROPERTY & STANDARDS  
P.O. BOX 3001  
BRIARCLIFF MANOR, NY 10510

EXAMINER
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PATEL, JAYESH A

ART UNIT	PAPER NUMBER
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2624

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/05/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/518,251

Applicant(s)

LESELLIER ET AL.

Examiner

Jayesh A. Patel

Art Unit

2624

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 16 December 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 December 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 08/17/2005.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 and 3-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Drouot et al. (WO 01/20912 A1) hereafter Drouot.

1. Regarding Claim 1, Drouot discloses a method of processing data corresponding to pixels of a sequence of digital images so as to detect blocking artefacts in **(Fig 1 and 3)**, said method comprising a step of high-pass filtering (110) a portion of a digital image at **(Fig 1 Element GF and Page 4 Lines 8-10)**, intended to supply at least one card of discontinuity pixels, and a step of detecting (120) blocking artefacts at **(Fig 1 Element CALC and Page 4 Lines 29-30)**, intended to detect a first type (p1) of elementary blocking artefact from the at least one card of discontinuity pixels at **(Page 5 Line 21)**, said method being characterized in that the detection step is also intended to detect a second type (p2) of elementary blocking artefact from the at least one card of discontinuity pixels at **(Page 5 Line 22)**.

2. Regarding Claim 3, Drouot discloses a data processing method as claimed in claim 2, also comprising a step of localizing the elementary blocking artefact in a row of the portion of the digital image from signs of filtered values of the sub-sampled pixels of the card of discontinuity pixels at **(Page 8 Lines 7-24)**.

3. Regarding Claim 4, Drouot discloses a data processing method as claimed in claim 1, wherein the high-pass filtering step is intended to supply two cards of discontinuity pixels, one horizontal card and one vertical card at **(Page 4 Lines 8-10)**.

4. Regarding Claim 5, Drouot discloses a data processing method as claimed in claim 1, wherein the high-pass filtering step is suitable for using a gradient filter at **(Page 4 Lines 8-16)**.

5. Regarding Claim 6, Drouot discloses a data processing method as claimed in claim 1, comprising a step of measuring the image quality, intended to provide a blocking artefact level from filtered values of the pixels corresponding to the blocking artefacts at **(Page 2 Lines 3-9)**.

6. Regarding Claim 7, Drouot discloses a data processing method as claimed in claim 1, comprising a step of correcting the blocking artefacts in accordance with their type (p1, p2) at **(Fig 1 Element PP, Page 4 Lines 31 through Page 5 lines**

**1-2 and Page 2 Lines 22-28).**

7. Regarding Claim 8, Drouot discloses a television receiver at **(Page 2 Lines 19-20 and 30-31)** comprising a processing device using the data processing method as claimed in claim 7, suitable for detecting blocking artefacts within a sequence of digital images and for correcting them with a view to displaying a sequence of corrected digital images on a screen of said receiver.

8. Regarding Claim 9, Drouot discloses a video decoder suitable for providing a sequence of decoded digital images and comprising a processing device using the processing method as claimed in claim 7, suitable for detecting blocking artefacts within the sequence of decoded digital images and for correcting them so as to provide a sequence of corrected digital images at **(Page 8 Lines 7-9).**

9. Regarding Claim 10, Drouot discloses a computer program product comprising a set of instructions which, when loaded into a circuit, cause said circuit to perform the method of processing digital images as claimed in claim 1 in **(Figs 1-3 and Page 12 Lines 21-27).**

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 2624

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Drouot in view of Thuillard (US 6011464) hereafter Thuillard.

**10.** Regarding Claim 2, Drouot discloses a data processing method as claimed in claim 1. Drouot however does not disclose wherein the high-pass filtering step (110) is suitable for using a wavelet transform, intended to supply at least one card of sub-sampled discontinuity pixels corresponding to a sub-band of said transform.

Thuillard discloses high pass filtering step suitable for using a wavelet transform at **(Col 2 Lines 5-14)**. Thuillard also discloses that the method as disclosed is suitable for noise detectors, passive infrared detectors, the spectral analysis of the signals of individual pixels in an image processing and for different sensors, such as gas and vibration sensors at **(Col 6 Lines 15-19)**.

Thuillard also discloses that the frequency analysis of this type is advantageous in providing and identification of higher frequencies, leading to faster and accurate results at **(Col 3 Lines 6-13)**. Both Drouot and Thuillard are from the same field of endeavor, therefore it would be obvious for one of ordinary skill in the art at the time the invention was made to use the teachings of Thuillard in the device and method of Drouot for the above reasons.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jayesh A. Patel whose telephone number is 571-270-1227. The examiner can normally be reached on M-F 7.00am to 4.30 pm (5-4-9). If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jingge Wu can be reached on 571-272-7429. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jayesh Patel  
03/30/2007

JP

  
JINGGE WU  
SUPERVISORY PATENT EXAMINER